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(54) Method for securely communicating remote control commands in a computer network

(57) A method for providing secure remote control commands in a distributing computer environment. In the preferred embodiment of the invention, a network administrator or network management software creates a shutdown record, including an index or time stamp, for powering down a specified network computer(s). Prior to broadcast over the network, a secure one-way hash function is performed on the shutdown record. The result of the one-way hash function is encrypted using the network administrator's private key, thereby generating a digital signature that can be verified by specially configured network nodes. The digital signature is appended to the original shutdown record prior to broadcast to the network. Upon receiving the broadcast message, the targeted network computer(s) validates the broadcast message by verifying the digital signature of the packet or frame. The validation process is performed by decrypting the hash value representation of the shutdown record using the network administrator's public key. A one-way hash function is also performed on the original shutdown record portion of the received message. If the two values match, the broadcast message is determined to be authentic and the shutdown control code is executed. The invention insures that the shutdown command was neither modified in transit nor originated from an unauthorized source.

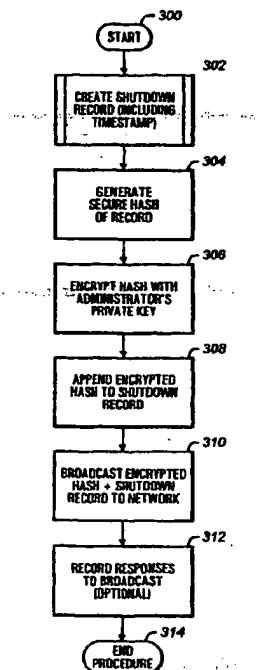


FIG. 3



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EUROPEAN SEARCH REPORT

Application Number

EP 98 30 6483

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)						
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim							
A	US 5 652 892 A (UGAJIN ATSUSHI) 29 July 1997 (1997-07-29) * the whole document *	1-25	G06F1/00						
A	US 5 198 806 A (LORD JOHN J) 30 March 1993 (1993-03-30) * column 2, line 27 - column 3, line 16 *	1-25							
A	WO 95 19595 A (FOX NETWORK SYSTEMS INC) 20 July 1995 (1995-07-20) * page 1, line 22 - page 2, line 7 * * page 3, line 27 - page 4, line 2 * * page 17, line 15 - line 24 * * page 41, line 11 - line 19 *	1-25							
A	WO 96 13106 A (ADVANCED MICRO DEVICES INC) 2 May 1996 (1996-05-02) -----								
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)						
			H04L G06F						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 33%;">Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>17 December 1999</td> <td>Powell, D</td> </tr> </table>				Place of search	Date of completion of the search	Examiner	THE HAGUE	17 December 1999	Powell, D
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<p>CATEGORY OF CITED DOCUMENTS</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document </td> <td style="width: 50%; vertical-align: top;"> T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons S : member of the same patent family, corresponding document </td> </tr> </table>				X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons S : member of the same patent family, corresponding document				
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EP 98 30 6483

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